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### NOTICE OF ALLOWANCE AND FEE(S) DUE

23432 7590 01/27/2010 COOPER & DUNHAM, LLP

30 Rockefeller Plaza 20th Floor NEW YORK NY 10112 EXAMINER

WHITEMAN, BRIAN A

ART UNIT PAPER NUMBER

1635 DATE MAILED: 01/27/2010

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFIRMATION NO.

 10/646,070
 08/22/2003
 Michael Wayne Graham
 0763/74768-BA-PCT-US/JPW/
 8796

 TITLE OF INVENTION: CONTROL OF GEINE EXPRESSION
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APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	04/27/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used to correspondence including a below or directed oth tions.	for transmitting the ng the Patent, advan- nerwise in Block 1,	ISSUE FEE and PUB ice orders and notificat by (a) specifying a ne	LICATI tion of n w corres	ON FEE (if require naintenance fees will spondence address; a	d). Blocks 1 through 5 : be mailed to the current ad/or (b) indicating a sep	should be completed where t correspondence address as arate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block I for any change of address)				Fee(	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
23432 COOPER & D 30 Rockefeller P 20th Floor	laza	72010		I be	Certify	icate of Mailing or Trans Fee(s) Transmittal is bein	smission g deposited with the United st class mail in an envelope above, or being facsimile date indicated below.	
NEW YORK, N	Y 10112						(Depositor's name)	
							(Signature)	
				L			(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED IN	VENTOR	Α	TTORNEY DOCKET NO.	CONFIRMATION NO.	
10/646,070	08/22/2003		Michael Wayne	Graham	0763/74768-BA-PCT-US/JPW/		/ 8796	
TITLE OF INVENTION								
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nonprovisional	YES	\$755	\$300		\$0	\$1055	04/27/2010	
EXAM	INER	ART UNIT	CLASS-SUBCL	ASS				
WHITEMAN		1635	514-04400	0				
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DATA ess an assignee is ident h in 37 CFR 3.11. Comp	" Indication form ed. Use of a Custon A TO BE PRINTED	or agents OR, a  (2) the name or egistered attor 2 registered palisted, no name  ON THE PATENT (pring gnee data will appear or s NOT a substitute for f	of up to alternative of a single rney or a tent attor will be int or type on the parting an	e firm (having as a m agent) and the names meys or agents. If no printed.	ember a 2 of up to name is 3 sidentified below, the o	document has been filed for	
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4a. The following fee(s) are submitted:    Issue Fee   Publication Fee (No small entity discount permitted)   Advance Order - # of Copies			A check is en Payment by c The Director i	A charact of Fee(s): (Please first reapply any previously paid issue fee shown above)     A check is enclosed.     Payment by credit eard. Form PTO-2038 is attached.     The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
	s SMALL ENTITY state	as. See 37 CFR 1.27.				ENTITY status. Sec 37 C		
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req records of the United Sta	uired) will not be acc ites Patent and Trade	cepted from anyone oth mark Office.	er than ti	he applicant; a registe	red attorney or agent; or t	he assignee or other party in	
Authorized Signature					Date			
Typed or printed name				Registration No.				
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	CFR 1.311. The infor U.S.C. 122 and 37 USPTO. Time will rden, should be sent O NOT SEND FEES	mation is required to ob CFR 1.14. This collecti- vary depending upon to to the Chief Informatic OR COMPLETED FO	otain or r on is est the indiv on Office RMS TO	etain a benefit by the imated to take 12 min idual case. Any comer, U.S. Patent and Tr D THIS ADDRESS.	public which is to file (an nutes to complete, includi ments on the amount of ti ademark Office, U.S. Dep SEND TO: Commissioner	d by the USPTO to process) ng gathering, preparing, and me you require to complete sartment of Commerce, P.O. for Patents, P.O. Box 1450,	

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#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS

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10/646,070	08/22/2003	Michael Wayne Graham 07	63/74768-BA-PCT-US/JPW	/ 8796	
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COOPER & DUNHAM, LLP			WHITEMAN, BRIAN A		
30 Rockefeller Plaza			ART UNIT	PAPER NUMBER	
20th Floor					

DATE MAILED: 01/27/2010

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)		
10/646.070	GRAHAM ET AL.		
Examiner	Art Unit		
Examiner	Art Unit		
Prion Whiteman	1625		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. X This communication is responsive to the amendment filed on 7/17/09 and terminal disclaimer filed on 12/14/09.
- The allowed claim(s) is/are 48,110,114-135,139,140 and 145-152.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) 🛛 All b) ☐ Some\* c) ☐ None of the:
    - 1. A Certified copies of the priority documents have been received.
    - 2. X Certified copies of the priority documents have been received in Application No. 09/100,812.
      - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) hereto or 2) to Paper No./Mail Date
    - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. 

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1. | Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08).
- Paper No./Mail Date 7/17/09 4. ☐ Examiner's Comment Regarding Requirement for Deposit
  - of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. T Examiner's Statement of Reasons for Allowance
- 9. ☐ Other

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# **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gary Gershik on 1/20/10.

The application has been amended as follows:

Specification:

The term -- (now ABANDONED) – has been inserted after the term 2000 on line 2 of page 1.

Claims

The term "prokaryotes or" in line 5 has been removed from claim 110.

The term "in cell" on line 2 of claim 133 has been removed.

Application/Control Number: 10/646,070

Art Unit: 1635

# **EXAMINER'S COMMENTS**

# Election/Restrictions

Claims 48, 110, 114-135, and 146-149 are directed to an allowable product. Pursuant to the procedures set forth in MPEP § 821.04(B), claims 139, 140, 145, and 150-152, directed to the process of making or using an allowable product, previously withdrawn from consideration as a result of a restriction requirement, hereby rejoined and fully examined for patentability under 37 CFR 1.104.

Because all claims previously withdrawn from consideration under 37 CFR 1.142 have been rejoined, the restriction requirement as set forth in the Office action mailed on 10/15/04 is hereby withdrawn. In view of the withdrawal of the restriction requirement as to the rejoined inventions, applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Whiteman whose telephone number 571-272-0764. The examiner can normally be reached on from 6:30 to 4:00 (Eastern Standard Time). The examiner can also be reached on alternate Fridays.

Art Unit: 1635

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor Tracy Vivlemore can be reached on 571-272-2914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Brian Whiteman/ Primary Examiner, Art Unit 1635